

Work Order ID 85749

June-14-12 1:58:19 PM

85749

Page 1

Item ID: D4149-041

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Crosstube Lug Assembly, Aft

Start Date: 14/06/2012 Start Qty: 16.00

16

Cust Item ID:

Required Date: 28/06/2012 Req'd Qty: 16.00

16

Customer:

Reference:

Approvals: Process Plan: MLJ

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D4149	C
-------	---

100		0.00							
-----	--	------	--	--	--	--	--	--	--

100

Small Fab

Memo

0.00

Small Fab

1- Assemble as per dwg

110	QC5- Inspect part completeness to step on W/O	0.00							
-----	-----------------------------------------------	------	--	--	--	--	--	--	--

110

QC

Memo

0.00

Quality Control

120	Identify as per dwg & Stock Location	0.00							
-----	--------------------------------------	------	--	--	--	--	--	--	--

120

Packaging

Memo

0.00

Packaging

16x 9/2/07/9

(x16)

16x SP
12-7-9

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Accept

N900040100Setup Start ***NS1***

Revision ID:

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Stop ***NS2***

Start Date: 14/06/2012 Start Qty: 16.00

16

Cust Item ID:

Required Date: 28/06/2012 Req'd Qty: 16.00

16

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.00

Quality Control

CK 12/7/10

MK
12-07-10

Picklist Print

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Work Order ID: 85749

Parent Item: D4149-041

Parent Item Name: Crosstube Lug Assembly, Aft

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D4149-041

Start Date: 14/06/2012

Required Date: 28/06/2012

Start Qty: 16.00

Required Qty: 16.00

D3910-1	Manufactured	No	100	Each	31.0000	1	16	**	EP 12/07/09
D3910-1									
Crosstube Lug									

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Shop Packet Print

Page 2

Picklist Print

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Page 3

Work Order ID: 85749

Parent Item: D4149-041

Parent Item Name: Crosstube Lug Assembly, Aft

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D4149-041

Start Date: 14/06/2012

Required Date: 28/06/2012

Start Qty: 16.00

Required Qty: 16.00

D4149-5

Manufactured No

100 Each

20.0000

1

16

D4149-5

Eyebolt Stud

Location

Loc Qty

Loc Code

ST102

20

83888

7

84195

13

AN3C12A

Purchased No

100 Each

225.0000

2

32

AN3C12A

Bolts

Location

Loc Qty

Loc Code

GA

38

120449

38

ST351

187

117514

4

118112

5

118451

22

119510

1

120423

51

121259

4

121584

50

121689

50

AN4C13A

Purchased No

100 Each

48.0000

3

48

AN4C13A

BOLT

Location

Loc Qty

Loc Code

ST357

48

120187

1

121827

47

**

12/07/09
B85783 (12)

**

23/07/09

**

48/07/09
M122141 (48)

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Shop Packet Print

Page 3

Picklist Print

June-14-12 1:58:24 PM

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Work Order ID: 85749

Parent Item: D4149-041

Parent Item Name: Crosstube Lug Assembly, Aft

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D4149-041

Start Date: 14/06/2012

Required Date: 28/06/2012

Start Qty: 16.00

Required Qty: 16.00

MS20615-4M18

Purchased

No

100

Each

53.0000

3

48

MS20615-4M18

Rivet

Location

Loc Qty

Loc Code

322

3

121349

3

ST322

50

121444

50

NAS1149C0332R

Purchased

No

100

Each

9,894.000

4

64

NAS1149C0332R

Washer

Location

Loc Qty

Loc Code

297

9892

122063

9892

ST298

2

121509

2

NAS1149C0432R

Purchased

No

100

Each

3,792.000

6

96

NAS1149C0432R

Washer

Location

Loc Qty

Loc Code

ST297

1070

117291

70

119124

1000

ST298

2722

121255

2722

** 3 48

PS 12/07/09

M122141 (182)

**

PS 12/07/09

64

**

PS 12/07/09

96

NCR: Yes / No

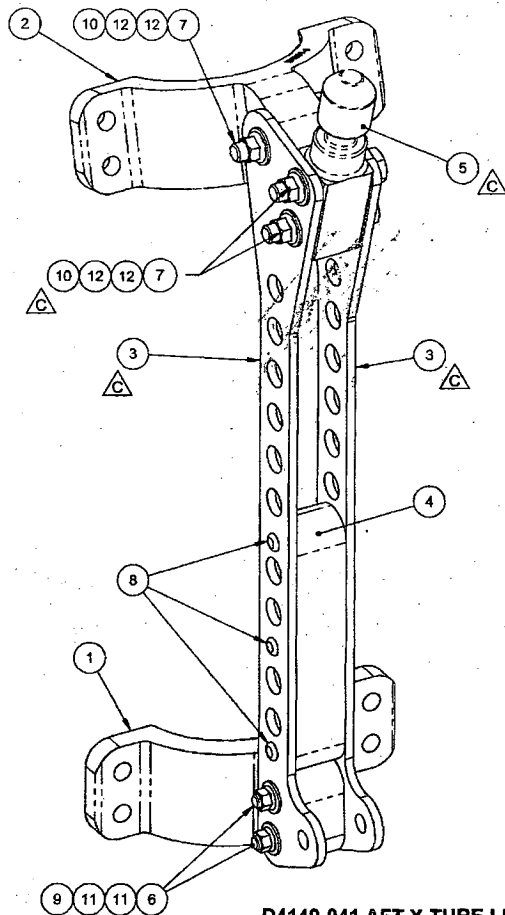
WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Other <input type="checkbox"/> </div> <div> Engineering Quality <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Offset/Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unauthorized <input type="checkbox"/>											

FAULT CATEGORY			
Landing Gear <input type="checkbox"/> Bending Passes Below Min <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimp at Bending <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Other <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Ripples on Inner Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	Hardware <input type="checkbox"/> Breaking <input type="checkbox"/> Missing <input type="checkbox"/> Size/Length <input type="checkbox"/> Spinning <input type="checkbox"/> Threading <input type="checkbox"/> Wrong Drill Holes <input type="checkbox"/> Misaligned <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Undersized <input type="checkbox"/> Too Many	General <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Documentation/Data <input type="checkbox"/> Finish <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Inspection Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Jigs/Fixtures/Tooling <input type="checkbox"/> Kit Incorrect <input type="checkbox"/> Kit Missing	<input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Off-Set <input type="checkbox"/> Orientation Misread <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Lost <input type="checkbox"/> Part Moved <input type="checkbox"/> Raw Material <input type="checkbox"/> Set-up <input type="checkbox"/> Supplier <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other



D4149-041 AFT X-TUBE LUG ASSY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4149-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 2.21 lbs

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4149-041	AFT X-TUBE LUG ASSY
1	1	D3910-1	X-TUBE LUG
2	1	D4091-1	MOUNTING LUG
3	2	D4149-1	AFT X-TUBE LUG PLATE
4	1	D4149-3	SPACER
5	1	D4149-5	EYEBOLT STUD
6	2	AN3C12A	BOLT
7	3	AN4C13A	BOLT
8	3	MS20615-4M18	RIVET
9	2	MS21043C3	NUT
10	3	MS21043C4	NUT
11	4	NAS1149C0332R	WASHER
12	6	NAS1149C0432R	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 85749 MJS
12/06/14 RELEASED
2011-02-23

C	HOLE DIA CHANGED TO 0.252" (D8-3); HOLE DIA CHANGED TO 0.250" (C8-5); REPLACED QTY(2) AN3C12A, MS21043C3 AND QTY(4) NAS1149C0332R WITH QTY(2) AN4C13A, MS21043C4 AND QTY(4) NAS1149C0432R (D5-1, D7-2)	SC	11.02.22
B	MS20615-4M18 WAS MS20615-4M20 (ZN D3-1 & B7-2); ADDED D4149-5 (SHT 5); D4149-5 WAS D3909-5 (ZN D3-1 & D7-2); REPLACED QTY(5) MS20615-4M18 WITH QTY(2) EACH AN3C12A, MS21043-3 AND QTY(4) NAS1149C0332R WASHER (ZN D3-1, C7-1, B7-2 & B3-2); Ø0.191 2 PL REPLACES Ø0.129 3 PL (ZN D8-3); REASON: SEE TR-D350-007-2 REV. B.	MB	10.07.05
A	NEW ISSUE	MB	10.06.18
REV.	DESCRIPTION	BY	DATE
DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SC		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D4149	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
DATE	11.02.22	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR REPRODUCED OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

AN4C13A BOLT
NAS1149C0432R WASHER, 2X
MS21043C4 NUT
3PL

D4149-5
EYEBOLT STUD

MS20615-4M18
RIVET
3 PL

D4149-041 AFT X-TUBE LUG ASSY

D4091-1
MOUNTING LUG

D4149-1
AFT X-TUBE LUG PLATE
2 PL

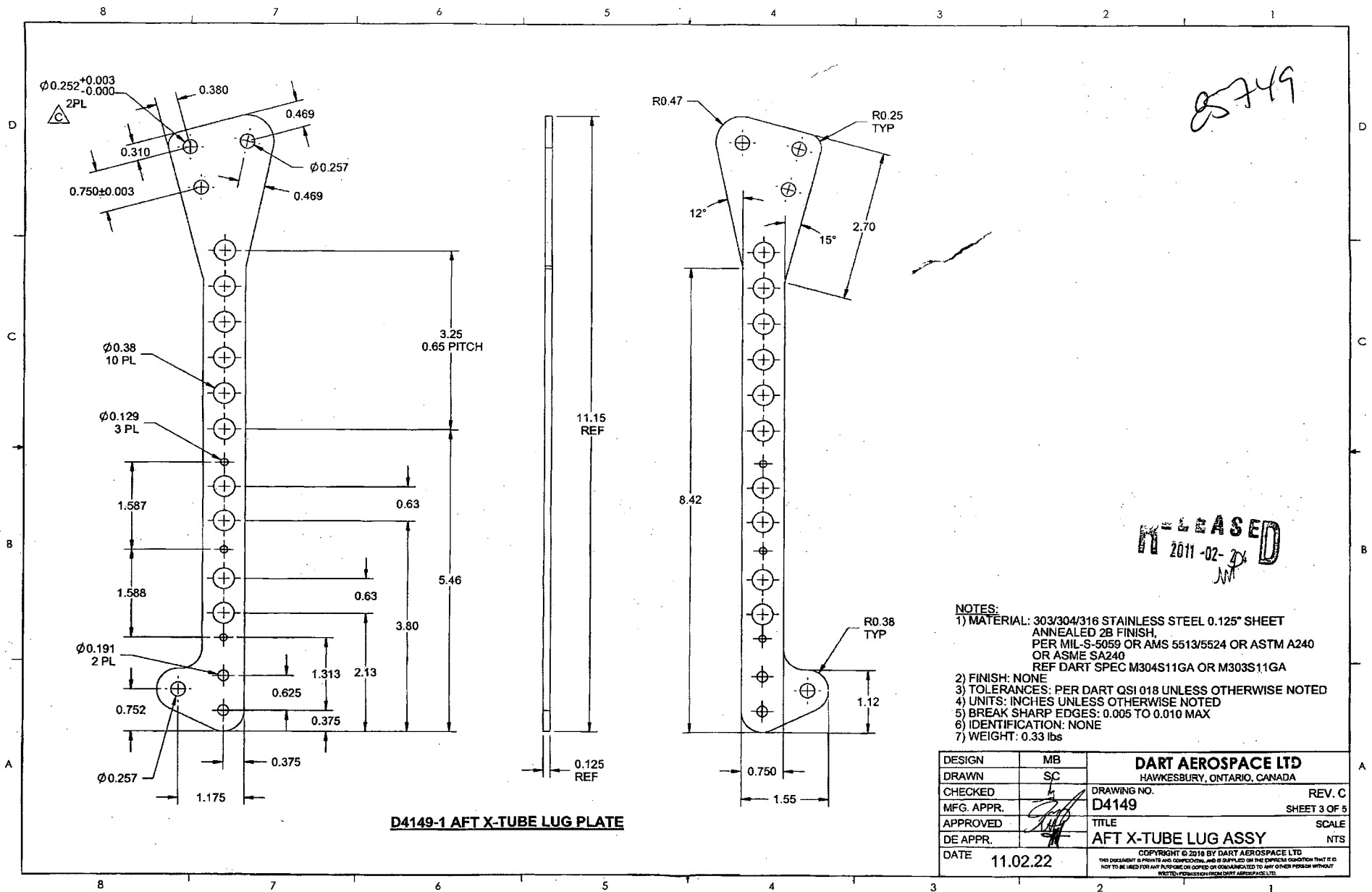
D4149-3
SPACER

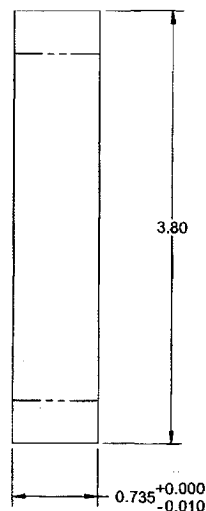
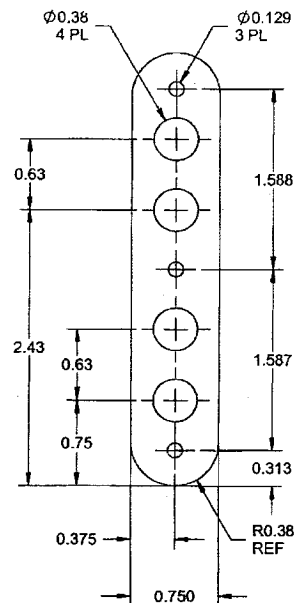
AN3C12A BOLT
NAS1149C0332R WASHER, 2X
MS21043C3 NUT
2 PL

D3910-1
X-TUBE LUG

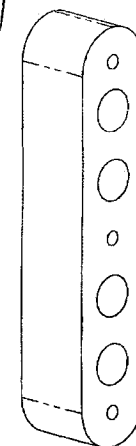
RELEASED
2011-02-24

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SC		
CHECKED	h	DRAWING NO. D4149	REV. C
MFG. APPR.		SHEET 2 OF 5	
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
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D4149-3 SPACER



85749

RELEASED
2011-02-24

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A276 OR A582
REF DART SPEC MS304B OR MS303B
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.47 lbs

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SC		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D4149	SHEET 4 OF 6
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
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